

Section 1 **MANAGEMENT OF CHANGE (MOC)**

MOC No: 2599	Originator: Hoang, Kiet D.	Date Issued: 8/28/1998	Passport No: 26051246	EWO No:	ABU: South Isomax	Plant: H2 Mfr Common	Year: 1998
Section 2 Reviewer: Waldrop, Jason S.	MOC Category: Leak Seal	PSM:	MOC Type: Temporary	Expiration Date: 9/15/2015	Other Temporary Reason Next Planned Shutdown		
<u>Project/Equipment Title:</u> Flange leaks 402-2p k-300B							
<u>Description of Change:</u> K-300B discharge flange is leaking and needs to be clamped as per VOC 402-2P.							

MOC will be required if the change will:

- ☐ Cause the use of different feed, chemicals or catalysts?
☐ Cause the use of different process conditions, process control, instrumentation, and protective devices or affect upstream/downstream plants?
☒ Cause the use of new or modified equipment [which is other than inkind]?
☐ Alter equipment siting, building, trailer locations, roads or fire protection?
☐ Require modifying existing and/or developing new procedures?

☐ Simultaneously Begin Construction and Start-up

Section 2

Stage 1	Pre-Implementation	Dept./Person Responsible	Date Complete	Completed By	References
	Design Review	PED	8/28/1998	Quiroz, Richard J.	
	Process Engineering Review				
	Instrumentation Review				
	Control System Review				
	Utilities Review				
	Environmental/Regulatory Review				
	Safety/Regulatory Review				
	Building Permits Review				
	Mechanical Review				
	Inspection Review				
	Metallurgy Review				
	Contruction Review				
	Leak Seal Review				
	Relief System Review				
	Infrastructure Review				
	PHA/HSE Review	OPS	8/28/1998	Ho, Greg N.	HSE attached

Authorization to Implement Change (Begin Construction): Approver: Sadekoski, Duane E. Date: 8/28/1998

Stage 2	Pre-Startup	Dept./Person Responsible	Date Complete	Completed By	References
	Procedures Review	Quiroz, Richard J.	8/28/1998	Quiroz, Richard J.	RI-621 Appendix II-1
	Communication/Training 1	Raddcliffe, John R.	8/31/1998	Raddcliffe, John R.	Training sent to crews
	Pre Start-up Safety Review				

Authorization to Start-Up Change: Approver: Bonilla, Ed Date: 1/12/1999

Extension of Temporary Change Approved By:	Approver: Waldrop, Jason S.	Expiration Date: 9/15/2015	Extention Reason requires K-300's and D/S pipi
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Stage 3	Post-Startup	Dept./Person Responsible	Date Complete	Completed By	References
	Communication/Training 1				
	Process Safety Information				

Change in Place - Reviews, Documentation & Testing Complete	Approver:	Date:
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MOC Cancelled:	Approver:	Date:
Cancellation Reason:		

Note 1: Emergency request for change should be routed by the Approver on the next working day	Retain Original in Division for five Years
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DESIGNS REVIEW CHECKLIST

You have been assigned a Design Engineering Review. This checklist is a guide to help ensure that all information necessary to evaluate the change is considered.

MOC Number 2599

Filing Reference

Person Responsible PED

Completed by Quiroz, Richard J.

Date Completed 8/28/1998

Project/Equipment Description:

K-300B discharge flange is leaking and needs to be clamped as per VOC 402-2P.

*When possible include copies of documents referenced in the summary.

DESIGNS REVIEW CHECKLIST

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Filing Reference

Person Responsible PED

Completed by Quiroz, Richard J.

Date Completed 8/28/1998

Project/Equipment Description:

K-300B discharge flange is leaking and needs to be clamped as per VOC 402-2P.

ENGINEERING REVIEW

- ☐ BIN Best Practic
- ☐ Civil & Structural
- ☐ Equipment Data Sheet
- ☐ Equipment Specification
- ☐ Fire Protection
- ☐ Hot Tap
- ☐ P&ID's Change due to New / Modified equipment
- ☐ P&ID's Change - Field condition not matching existing P&ID
- ☐ Plot Plan
- ☐ Seismic
- ☐ SIS Update
- ☐ Temporary Leak Repair

EQUIPMENT REVIEW

- | | |
|--|--|
| <input type="checkbox"/> Columns & Pressure Vessels | <input type="checkbox"/> Instrumentation |
| <input type="checkbox"/> Compressor, Blowers & Mechanical Equipment | <input type="checkbox"/> Insulation |
| <input type="checkbox"/> Concrete & Steel Structure, Walks and Stair | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Control Rooms & Building | <input type="checkbox"/> Piping |
| <input type="checkbox"/> Exchangers, Condensers, Heaters & Cooling Tower | <input type="checkbox"/> Pumps & Drivers |
| <input type="checkbox"/> Facilities & Siting | <input type="checkbox"/> Relief & Venting Systems |
| <input type="checkbox"/> Foundation | <input type="checkbox"/> Sewers, Roads & Miscellaneous |
| <input type="checkbox"/> Furances & Boilers | <input type="checkbox"/> Tanks |
| <input type="checkbox"/> Honeywell | <input type="checkbox"/> Update Refinery Relief Study |
| <input type="checkbox"/> Honeywell Process Simulator | <input type="checkbox"/> Utility Systems |
| <input type="checkbox"/> HVAC | |

SUMMARY OF REVIEW*

*When possible include copies of documents referenced in the summary.

DESIGNS REVIEW CHECKLIST

You have been assigned a Design Engineering Review. This checklist is a guide to help ensure that all information necessary to evaluate the change is considered.

MOC Number	2599
Filing Reference	
Person Responsible	PED
Completed by	Quiroz, Richard J.
Date Completed	8/28/1998

Project/Equipment Description:

K-300B discharge flange is leaking and needs to be clamped as per VOC 402-2P.

HEALTH & SAFETY EVALUATION

Date Issued: 8/28/1998

Maximo No: 26051246

MOC Number 2599

ABU: South Isomax

EWO No:

Filing Reference

Plant: H2 Mfr Common

Person Responsible OPS

Section 2 Reviewer: Waldrop, Jason S.

Completed By Ho, Greg N.

Project/Equipment Title: Flange leaks 402-2p k-300B

Date Completed 8/28/1998

Description: K-300B discharge flange is leaking and needs to be clamped as per VOC 402-2P.

Step 1: ☐ Notify USW ☐ USW Representation Present USW Representative:

Worker's Committee Member/Steward's comments if unable to attend:

☐ Notify Trainer ☐ TrainerRepresentation Present Training Representative:

Step 2: Involve: Operations, Maintenance, Technical and others with appropriate expertise relevant to the change (CRTC, Contractors, etc)

Attendees:

Step 3: Think about the task at hand. Discuss the existing situation. Discuss the change. Discuss the impact of the change on the existing situation. Determine the training requirements for this change.

Step 4: Training Type: 0

Develop a list of concerns, consider your options, consider your following:

*H2S *NH3 *Acid *Caustic *Benzene *Fall Protection *Staging *Scott Air *PPE *Hot Work *Confined Space Entry *Evacuation Plan *Safety Operator

HSE Action Items

Additional Comments

PROCEDURE REVIEW CHECKLIST

You have been assigned a Procedure Review. This checklist is a guide to help ensure that all information necessary to evaluate the change is considered.

MOC Number 2599

Filing Reference

Person Responsible Quiroz, Richard J.

Completed By Quiroz, Richard J.

Date Completed 8/28/1998

Project/Equipment Description:

K-300B discharge flange is leaking and needs to be clamped as per VOC 402-2P.

- ☐ Alarm Procedures
- ☐ Any Special or unique hazards
- ☐ COD/Ops Monitor
- ☐ Consequences of deviation
- ☐ Control measure to be taken if physical contact or airborne exposure occurs.
- ☐ Precautions necessary to prevent exposure, including administrative controls, engineering controls, and personnel protective equipment.
- ☐ properties of, and hazards presented by, the chemicals and operation of the process.
- ☐ References to additional procedures, such as Safe Work Practices
- ☐ Routine Duties
- ☐ Safety system and their functions
- ☐ Steps required to correct and/or avoid deviation

Steps for each operating Phase

- ☐ Emergency
- ☐ Normal
- ☐ Start-Up/Shutdown
- ☐ Temporary

SUMMARY OF REVIEW*

*When possible include copies of documents referenced in the summary.

Stage Two Training and Communication Review

10/5/2012 8:11:31 AM

- ☐ Identify the affected employees.
 - * Maintenance and Technical affected?
 - * Employee who will require training to start up the change based on the level of training.
 - * Employees who will receive training after the start up BUT before they can perform work affected by the change
- ☐ Procedures have been modified/written (Ops/SSO/Trainer)
- ☐ Identify the affected employees..
 - * Lesson plan cover sheet (includes training objective statement and list of affected employees)
 - * Procedural changes (Standing Orders, mark-ups)
 - * Flow diagrams (final or mark-ups)
- ☐ Determine level of training
- ☐ Training has been scheduled
- ☐ Affected employees have been trained in order to start up the change.

MOC No:

Date Completed:

Completed By:

Person Responsible:

Project/Equipment Title:

Summary of Review: